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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,282	11/16/2007	Krishanthi Balakrishnan	102792-1070	2119
27380 7590 09/13/2010 PARFOMAK, ANDREW N. NORRIS MCLAUGHLIN & MARCUS PA 875 THIRD AVE, 8TH FLOOR NEW YORK, NY 10022				
EXAMINER BUCKLEY, AUDREA				
ART UNIT		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/578,282

**Applicant(s)**

BALAKRISHNAN ET AL.

**Examiner**

AUDREA J. BUCKLEY

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54, 56 and 57 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 6-54, 56 and 57 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/06)  
Paper No(s)/Mail Date 6/5/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of claims 4 and 5 in the reply filed on 2/1/2010 is acknowledged. The traversal is on the ground(s) that since the common technical feature is included in all pending claims that no search burden exists. This is not found persuasive because unity is destroyed as set forth in the restriction requirement mailed 9/14/2009 and in accordance with PCT Rule 13.2.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-3, 6-54, 56, and 57 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected insect control articles, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 2/1/2010.

Claims 4 and 5 are examined on the merits herein.

### ***Priority***

This application is a 371 of PCT/GB04/04692, filed 11/5/2004, and claims priority to foreign application 0326053.6 filed in the United Kingdom on 11/7/2003. Certified copies of these documents have not been received.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 6/5/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiwatari et al. (EP 0792581 A1, published 1997, submitted in IDS of 6/5/2006) in view of Sembo et al. (US 2001/0049390 A1, published Dec. 2001) as evidenced by Takada (US 5,629,334, issued May 1997).**

Ishiwatari et al. teach an insect control device in which at least one volatile insecticidal or insect repellent compound such as transfluthrin is applied on a support with acetone as a solvent. The active agent is then distributed by evaporation (see page 2, lines 24-30). The support used may be paper (cellulosic), a soft paper which is preferred because it provides easy fabrication and impregnation of the active agent (see page 2, lines 54-56). Because Ishiwatari et al. does not teach an embodiment of the invention in which one of the instantly recited pyrethroid active agents is used, this rejection is made using obviousness rationale. It is noted that Ishiwatari et al. teach Example 1 using a carboxylate active agent in acetone on a filter paper substrate (see page 3, lines 25-30) and that Ishiwatari et al. teach this particular carboxylate pyrethroid to be equivalent to transfluthrin (see page 2, lines 27 and 29). Therefore, the substitution of transfluthrin for this carboxylate pyrethroid would have been obvious; see MPEP 2144.06 regarding the obviousness of equivalents.

As to the functional claim language regarding the carrier solvent (evaporation rate, boiling point, polarity index, release rate), Ishiwatari does not limit the solvent as instantly recited. Example 1 of Ishiwatari teaches acetone as an acceptable carrier solvent (see specification, page 21, line 27). Similarly, Sembo et al. teach non-aromatic hydrocarbons and acetone to be exchangeable

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alternative liquid carriers (see paragraph [0011]) in insecticidal compositions comprising an active agent such as a pyrethroid including transfluthrin (see [0023]) or the chrysanthemate in Formulation Example 2 (see [0027]).

Formulation Example 2 teaches the chrysanthemate active in the hydrocarbon carrier Isopar-G which meets the instantly recited functional limitations (see [0027] of Sembo and see Table 1 on page 28 of the substitute specification as filed 5/4/2006). As evidenced by Takada, chrysanthemate derivatives are examples of pyrethroid compounds (see abstract in particular).

It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use the Isopar G carrier as taught in the pyrethroid containing formulation of Sembo in place of the acetone carrier in Example 1 of Ishiwatari. See MPEP 2144.06 regarding the obviousness of equivalents.

**Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiwatari et al. (EP 0792581 A1) in view of Sembo et al. (US 2001/0049390 A1, published Dec. 2001) as evidenced by Takada (US 5,629,334, issued May 1997) as applied to claim 4 above, and further in view of Hoffmann et al. (US 2003/0198659 A1, filed Oct. 2002).**

Neither Ishiwatari et al. nor Sembo teach the particular metofluthrin pyrethroid as in pending claim 5. However, Hoffmann et al. teach metofluthrin to be a pyrethroid active agent equivalent to transfluthrin ([0134] lines 14 and 17 on page 11).

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Therefore, substituting metofluthrin for transfluthrin in the formulations of Ishiwatari and Sembo would have been obvious. MPEP 2144.06 indicates that when it is recognized in the art that elements of an invention can be substituted, one for the other, while retaining essential function, such elements are art-recognized equivalents.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 4 and 5 provisionally are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/577,910 in view of Ishiwatari et al. (EP 0792581

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A1) in view of Sembo et al. (US 2001/0049390 A1, published Dec. 2001) and Hoffmann et al. (US 2003/0198659 A1, filed Oct. 2002). Claim 1 of the copending application includes a holder comprising a cellulosic substrate for administration of a vapor active pyrethroid. The copending application does not teach the particular pyrethroid active agents instantly recited. However, Ishiwatari et al. teach an insect control device in which at least one volatile insecticidal or insect repellent compound such as transfluthrin is applied on a support with acetone as a solvent. The active agent is then distributed by evaporation (see page 2, lines 24-30). The support used may be paper (cellulosic), a soft paper which is preferred because it provides easy fabrication and impregnation of the active agent (see page 2, lines 54-56). Therefore, the teaching of Ishiwatari is analogous to the holder device of the copending application.

Ishiwatari et al. further teaches Example 1 using a carboxylate active agent in acetone on a filter paper substrate (see page 3, lines 25-30) and that Ishiwatari et al. teach this particular carboxylate pyrethroid to be equivalent to transfluthrin (see page 2, lines 27 and 29). Therefore, the substitution of transfluthrin for this carboxylate pyrethroid would have been obvious; see MPEP 2144.06 regarding the obviousness of equivalents. As applied above, Sembo et al. teach non-aromatic hydrocarbons and acetone to be equivalent liquid carriers (see paragraph [0011]) in insecticidal compositions comprising an active agent such as a pyrethroid including transfluthrin (see [0023]) or the chrysanthemate in Formulation Example 2 (see [0027]). Formulation Example 2 teaches the



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chrysanthemate active in the hydrocarbon carrier Isopar-G which meets the instantly recited functional limitations (see [0027] of Sembo and see Table 1 on page 28 of the substitute specification as filed 5/4/2006). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use the Isopar G carrier as taught in the pyrethroid containing formulation of Sembo in place of the acetone carrier in Example 1 of Ishiwatari. See MPEP 2144.06 regarding the obviousness of equivalents.

As to claim 5, Hoffman teaches metofluthrin to be a pyrethroid known for its insecticidal activity (see [0134]) and capable of being administered from a fibrous matrix (see abstract, in particular). Metofluthrin is functionally equivalent to transfluthrin and therefore would have been an obvious substitution in the device of Ishiwatari and the copending application.

This is a provisional obviousness-type double patenting rejection.

### ***Conclusion***

No claims are allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUDREA J. BUCKLEY whose telephone number is (571)270-1336. The examiner can normally be reached on Monday-Thursday 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fereydoun Sajjadi can be reached on (571) 272-3311.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AJB/

/Richard Schnizer/  
Primary Examiner, Art Unit 1635